Ninth Division ATS Center requests that any potential Multi-Protocol Decoder Rack shall be equal to the **I-Volution VSG 5000**, but not limited to the following specifications.

- Decoder shall be capable of high quality digitized video over standard IP Ethernet network using H.264, MPEG-4.
- Decoder Rack shall have the ability to communicate exclusively with the **VSG5000-D**, and the **Data I/F Card**
- Decoder will be required to be outfitted with **eight (8) VSG5000-D Cards** and **eight (8) VSG5000 Data I/F Cards**.
- Decoder shall have the capabilities to provide full motion quality video for digital video surveillance application.
- Decoder shall have the capabilities to multi-streaming up to full D1 on each of its 8 (eight) channels.
- Decoder will be required to have the capabilities within a compact 7RU VSG 5000 chassis, up to 104 video / 104 serial data / 104 audio channels can be digitized & compressed for transport over a standardized IP network.

Below are the Performance and Electronic Specification for the approved Multi-Protocol Decoder.

Multi-Stream	Muilt-Streaming up to D1, 25/30 fps
Compression	ITU H.264, MPEG-4, MPEG-2, and MJPEG
Resolution	D1, 4CIF, 2CIF, CIF, OCIF, NTSC 720x480, 352x480, 352x240, 176x144,PAL 720x576, 325x576, 352x288, 176x144
Frame Rate / Bit Rate	1 to 25/30 fps /Constant and Variable configurable for 128 Kbps to 4 Mbps
LAN Interface / Protocols	IEEE 802.3 Ethernet RJ-45, 10/100 Base - T, Auto-SenseTCP, UDP, IPv4, IGMPv2, RTP, RTSP, NTP
Format / Connectors	Serial, Asynchronous / 8 x RJ45, 1 per video
Interface Protocol	RS232, RS422/485 2W/4W
Data Rate / Connectors	300bps to 115kbps / 8 x RJ45, 1 per video
Video Input	Composite Video, 1.0Vp-p, 75 ohm, 8 (eight) BNC Connectors
Operating Temperature	Shall operate between -10 to +60C to (-14 to -140F)
Relative Humidity	5% to 95% Non-Condensing
Live View / PTZ View	Built- in viewing with PTZ control for common PTZ
Dimensions	Single slot within VSG 5000 chassis

Ninth Division ATS Center requests that any potential Multi-Protocol Standalone Encoder shall be equal to the **Impath I-Volution i5110-ET**, but not limited to the following specifications.

- Encoder shall be capable of high quality digitized video over standard IP Ethernet network.
- Encoder shall have the capability to encode video up to full resolution and full frame rate (i.e. up to DVD quality).
- Encoder will be required to be NEMA TS-2 certified to provide the highest video availability.
- Encoder shall have the capabilities to provide full motion quality video for digital video surveillance application.
- Encoder shall have the capabilities to commence streaming towards the designated destination upon power up.
- Encoder will be required to have the capabilities to be managed with standard browser locally or remotely via the embedded WED Server (HTTP).

Below are the Performance and Electronic Specification for the approved Multi-Protocol Standalone Encoder.

Multi-Stream	Triple Streaming up to DI, 30/25 fps configurable from 50Kbps to 10Mbps
Protocol	ITU H.264 (ISO MPEG-4 AVC Baseline), MPEG-2, MPEG-4, and MJPEG
Resolution	NTSC 720x480, 352x240, 176x120
Frame Rate / Bit Rate	Constant and Variable to 30/25 fps configurable for 50 Kbps to 10 Mbps
LAN Interface / Protocols	IEEE 802.3 Ethernet RJ-45, 10/100 Base - T, Auto-SenseTCP, UDP, IPv4, IGMPv2, RTP, RTSP, NTP
Format / Connectors	Serial, Asynchronous / 2 Ports via DB9
Interface Protocol	Port 1 - RS232, Port 2- RS422/485 2W/4W
Video Analytics Events	Multi-rule detection with HTTP Post for response control event manager along with marked up images
Audio Interface	Line In/Out via 3.5 mm mini-jacks, G.711, Bi-directional Mono
Operating Temperature	Shall operate between -34 to +74C to (-29 to -165F)
Relative Humidity	5% to 95% Non-Condensing
Live View / PTZ View	Built- in viewing with PTZ control for common PTZ
Power Requirements	10 to 14 VDC / Approx 5W